

REMARKS

In the referenced Office action, the informal drawings filed with the application were objected to and corrected replacement drawings were required in compliance with 37 CFR 1.121(d). In response, Applicants are submitting herewith formal drawings in compliance with 37 CFR 1.121(d) to replace the earlier filed and objected to informal drawings. Each formal drawing sheet being submitted is labeled in the top margin as "Replacement Sheet" pursuant to 37 CFR 1.121(d). Accordingly, Applicants respectfully request that the objection to the drawings be withdrawn.

Also, in the Office action, claims 1-28 were rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Patent No. 6,603,137 B2, Hochstein. In response, independent claims 1, 11 and 21 were amended to be more specific in their recitation in particularly pointing out the invention intended to be claimed by Applicants. In addition, dependent claims 2, 13 and 14 were cancelled and dependent claim 3 was amended to render the recitation thereof consistent with the amended claim 1. Support for the amendments to the independent claims 1 and 11 may be found in the cancelled claims dependent therefrom and in Figures 2 and 3 of the instant application. Support for the amendments to independent claim 21 may be found in Figure 3 and in dependent claim 12. Accordingly, amended and original claims 1, 3-12, 15-28 remain in the instant application.

Applicants respectfully traverse the anticipatory rejection of the amended and original claims of the instant application based on Hochstein and offer the following remarks in support of their position.

Hochstein teaches a system for detecting raindrops on the windshield of an automobile. When the rain drop build up reaches a threshold level, Hochstein's system controls the wipers to clean the windshield of the raindrops. Hochstein's system uses a pulsed IR light source to illuminate a viewed surface portion of the windshield with light rays so that the rain drops or other moisture specularly reflects a portion of the pulsed radiation which is focused on a focal plane array for detection and analysis (see col. 3, lines 33-48). A preferred mounting location of the illuminator is adjacent the glass windshield inside the vehicle in which case the radiation must pass through the glass windshield to illuminate the raindrops on the outside of the glass (see

col. 6, lines 51-55). Accordingly, in the Hochstein system, light is not injected edgewise into the windshield, but rather a viewed surface area of the windshield is illuminated as noted above.

In contrast, amended method claim 1 and amended apparatus claim 11 both recite, in substance, injecting light edgewise into the window to cause said light to pass internally through the window from one window edge side to another window edge side along an axis which intersects a viewing area of the window, some of said injected light being passed through the window surface and reflected from contaminants in said viewing area of said surface. As noted above, Hochstein does not teach or suggest such injection of light through a window of the viewing system. Accordingly, for at least this reason, amended independent claims 1 and 11 are novel and patentable over Hochstein. Since the amended and remaining dependent claims from independent claims 1 and 11 include all of the limitations thereof, they are also novel and patentable over Hochstein for at least the reasons given for their parent claims.

In regard to amended independent claim 21, it recites, in substance, at least one light source disposed to inject light edgewise into said window to cause reflections of the injected light off of contaminants on said window surface. Accordingly, amended claim 21 is novel and patentable over Hochstein for at least the reasons given above for amended claims 1 and 11.

In addition, the viewing system recited by amended claim 21 includes a processor for processing both of said electrical image data of said scene excluding reflected light from said contaminants, and electrical image data of said scene including reflected light from said contaminants to detect said contaminants on said external surface and to determine if the detected contaminants will affect the electrical image data of said scene. Hochstein does not teach or suggest a processor which determines if the detected contaminants will affect the electrical image data of the scene. Rather, Hochstein treats the contaminants as part of the scene of the viewing area portion of the windshield to determine when to turn on and off the windshield wipers. Thus, the system of amended independent claim 21 is not only novel and patentable over Hochstein for the same reasons given for amended claims 1 and 11 given above, but also because the processor recited therein is not taught or suggested by Hochstein.

Dependent claims 22-28 include all of the limitations of amended claim 21 and are therefore, novel and patentable over Hochstein for at least the same reasons given for their parent

claim. In addition, some or all of the dependent claims are novel and patentable over Hochstein in their own right. For example, dependent claim 25 recites that the processor is operative to determine a number of pixel intensity values of the compensated image data that are greater than the predetermined value, and to determine whether or not to disregard a scene image based on said number.

It is noted that Applicants have not challenged the Hochstein reference as being applied against the claims of the instant application under 35 U.S.C. 102(a); however, Applicants reserve the right to challenge the reference in a subsequent response should the examiner continue with his rejection of the claims using Hochstein.

In view of the above, the anticipatory rejections of the amended and remaining claims of the instant application should be withdrawn and the instant application be permitted to go to issuance.

Respectfully submitted,


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